



Cabarrus County Emergency Medical Services System Protocol & Scope of Practice Update 2010 for MR & EMT

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EM



Introduction

- The NC Office of EMS and the NC College of Emergency Physicians enacted changes regarding the regulation of emergency medical systems in the state of NC. This change was made in accordance with 10A NCAC 13P .0405. NC assigns responsibility of the EMS system locally to the county government. The EMS system is comprised of all responders who function & provide medical services in the pre-hospital environment

Protocol & Scope of Practice Description

- Each system (county-wide) is required to have a single set of uniform patient care guidelines for all providers operating in the pre-hospital environment. This document governs the practice of EMS services, rescue agencies providing patient care, volunteer first responders, paid first responders, specialty care transport, and special event coverage teams in the pre-hospital environment of Cabarrus County.

Regulatory Authority

- The **NC Office of EMS required that protocols be adopted unchanged in the original NCCEP format** unless specific system needs were identified that would optimize care in the local community.
- 10A NCAC 13P
- GS 150B
- GS 143
- NC Governor Executive Order Number 9

Objectives

- Review changes to scope of practice
- Review changes to protocol
- Conduct training regarding new allowable scope of practice
- Review protocol format

Medical Responder

(changes are noted in color)

- 1 – Airway suction
- 2 – Carbon monoxide measurement non-invasive
- 3 – Cardiopulmonary resuscitation
- 4 – Defibrillation – automated
- 5 – Glucose measurement
- 6 – Medication administration specific below
- 7 – Orthostatic blood pressure
- 8 – Oxygen administration
- 9 – Patient assessment
- 10 – Pulse oximetry
- 11 – Reperfusion checklist
- 12 – Restraints
- 13 – Spinal immobilization
- 14 – Splinting
- 15 – Stroke screen
- 16 – Thermometer (oral, rectal, tympanic)
- 17 – Wound care

Medical Responder

(changes are noted in color)

Approved Medications

- 1 – Atropine auto injector (self or patient in setting of bioterrorism)
- 2 – Epinephrine auto injector
- 3 – Oxygen
- 4 – Pralidoxime auto injector (self or patient in setting of bioterrorism)
- 5 – Topical hemostatic (bleeding control) **agents**

Emergency Medical Technician

(changes are noted in color)

12 Lead acquisition & transmission

Airway, suction

Carbon monoxide measurement non-invasive

Cardiopulmonary resuscitation

Defibrillation – automated

Medication administration specific below

Metered dose inhaler

Nebulizer

Oxygen administration

Pulse oximetry

Respirator operation

Spinal immobilization

Stroke screen

Wound care

Airway, blind insertion device

Capnography

Glucose measurement

Orthostatic blood pressure

Patient assessment

Reperfusion checklist

Restraints

Splinting

Thermometer (oral, rectal, tympanic)

Emergency Medical Technician

(changes are noted in color)

Approved Medications

Acetaminophen

Diphenhydramine (*PO only*)

Narcan (*intra-nasal only*)

Nasal spray decongestant (otrivin)

Oxygen

Atropine auto injector (*self or patient in setting of bioterrorism*)

Beta agonist (albuteral – *only if patient is currently on home beta agonist*)

Nitroglycerin (*only if patient is currently on home NTG*)

Non-prescription medications (*Tylenol, Motrin, PepTum, Benadryl*)

Pralidoxime auto injector (*self or patient in setting of bioterrorism*)

Topical hemostatic (bleeding control) agents

Aspirin

Epinephrine auto injector

Ibuprofen

Oral glucose

Airway, Adult

- ABC
- Basic procedures
- In setting of cardiac or respiratory arrest, placed BIAD
- ETCO₂ monitoring (capnography or colormetric) & pulse oximetry
- Ventilatory rate 6-12 bpm. Avoid hyperventilation
- Review protocol

Pediatric Airway

- ABC
- Basic procedures
- In the setting of cardiac or respiratory arrest, consider BIAD ONLY if pulse oximetry cannot be maintained at 94 with BVM
- ETCO₂ monitoring (capnography or colorimetric) and pulse oximetry
- Ventilatory rate 12-30 (age dependent)
- Review protocol

Allergic Reaction

- Universal patient care protocol
- Hives / rash: diphenhydramine PO 25 mg
- Severe distress/shock: Epinephrine 1:1000 auto injector
- No contraindication to the use of Epinephrine 1:1000 in the setting of severe allergic reaction
- Review protocol

Chest Pain

- Universal patient care protocol
- 12 Lead EKG (if equipped)(EMT may perform, EMT-P must read)
- Aspirin 324 mg (4 baby ASA) unless contraindicated by allergy)
- NTG 0.4 mg (1 tablet) unless contraindicated by hypotension
- (patient must have prescription for NTG in order for EMT to use NTG, however, you are no longer required to “assist in administration”)
- Review protocol

Epistaxis

- Universal patient care protocol
- Compress nostrils, tilt head forward
- Have patient blow nose
- Otrivin (1 spray each nare) unless contraindicated by hypertension
- Review protocol

Overdose

- Universal patient care protocol
- BLS procedures
- Determine agent
- If suspected narcotic (respiratory depression, respiratory arrest, constricted pupils) then consider Narcan
- Narcan 0.4-2 mg intranasal (titrate to effect)...give slowly
- Review protocol

Toxicology

- Universal patient care protocol
- Determine agent
- If suspected carbon monoxide poisoning or subject in a fire, consider Rad 57 monitoring
- Rad 57 carbon monoxide monitoring (if equipped) & pulse oximetry
- Review protocol

Respiratory Distress

- Universal patient care protocol
- BLS procedures & oxygen as indicated
- If wheezing present and suspected asthma/COPD, then consider albuteral
- Albuteral 2.5 mg by nebulizer or metered dose inhaler
- (patient must have prescription for beta agonist in order for EMT to use albuteral, however, you are no longer required to “assist in administration”)
- Review protocol

Special Events & Operational Care

<u>Condition</u>	<u>Symptoms</u>	<u>Medication</u>	<u>Dose</u>
Gastrointestinal	Diarrhea/Heartburn	Bismuth Subsalicylate or equivalent	525 mg PO
Minor Pain	Headache	Acetaminophen	500-1000 Mg PO
Minor Pain	Muscle pain, strains	Ibuprofen	200-400 MG PO
Allergy Symptoms	Sneezing, runny nose, irritated eyes caused by allergies, Rash from allergic reaction	Diphenhydramine	25 mg PO
Motion Sickness	Nausea from motion	Diphenhydramine	25 mg PO

Standards Procedure (Skill)

12 Lead ECG

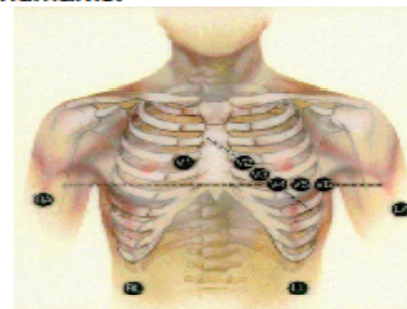
Clinical Indications:

- Suspected cardiac patient
- Suspected tricyclic overdose
- Electrical injuries
- Syncope

B	EMT	B
I	EMT-I	I
P	EMT-P	P

Procedure:

1. Assess patient and monitor cardiac status.
2. Administer oxygen as patient condition warrants.
3. If patient is unstable, definitive treatment is the priority. If patient is stable or stabilized after treatment, perform a 12 Lead ECG.
4. Prepare ECG monitor and connect patient cable with electrodes.
5. Enter the required patient information (patient name, etc.) into the 12 lead ECG device.
6. Expose chest and prep as necessary. Modesty of the patient should be respected.
7. Apply chest leads and extremity leads using the following landmarks:
 - RA -Right arm
 - LA -Left arm
 - RL -Right leg
 - LL -Left leg
 - V1 -4th intercostal space at right sternal border
 - V2 -4th intercostal space at left sternal border
 - V3 -Directly between V2 and V4
 - V4 -5th intercostal space at midclavicular line
 - V5 -Level with V4 at left anterior axillary line
 - V6 -Level with V5 at left midaxillary line
8. Instruct patient to remain still.
9. Press the appropriate button to acquire the 12 Lead ECG.
10. If the monitor detects signal noise (such as patient motion or a disconnected electrode), the 12 Lead acquisition will be interrupted until the noise is removed.
11. Once acquired, transmit the ECG data by wireless to the appropriate hospital.
12. Contact the receiving hospital to notify them that a 12 Lead ECG has been sent.
13. Monitor the patient while continuing with the treatment protocol.
14. Download data as per guidelines and attach a copy of the 12 lead to the ACR.
15. Document the procedure, time, and results on/with the patient care report (PCR)
16. Transport directly to cardiac catheterization lab as directed



Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

Procedure 1

This procedure has been altered from the original 2009 NCCEP Procedure by the local EMS Medical Director

2009

Standards Procedure (Skill)

Airway: BIAD-Combitube

Clinical Indications for Blind Insertion Airway Device (BIAD) Use:

- Inability to adequately ventilate a patient with a Bag Valve Mask or longer EMS transport distances require a more advanced airway.
- Appropriate intubation is impossible due to patient access or difficult airway anatomy.
- Inability to secure an endotracheal tube in a patient who does not have a gag reflex where at least one failed intubation attempt has occurred.
- Patient must be ≥ 5 feet and ≥ 16 years of age and must be unconscious.

Procedure:

B	EMT	B
I	EMT- I	I
P	EMT- P	P

1. Preoxygenate and hyperventilate the patient.
 2. Lubricate the tube.
 3. Grasp the patient's tongue and jaw with your gloved hand and pull forward.
 4. Gently insert the tube until the teeth are between the printed rings.
 5. Inflate line 1 (blue pilot balloon) leading to the pharyngeal cuff with 100 cc of air.
 6. Inflate line 2 (white pilot balloon) leading to the distal cuff with 15 cc of air.
 7. **Ventilate the patient through the longer blue tube.**
 - Auscultate for breath sounds and sounds over the epigastrium.
 - Look for the chest to rise and fall.
 8. **If breath sounds are positive and epigastric sounds are negative, continue ventilation through the blue tube. The tube is in the esophagus.**
 - In the esophageal mode, stomach contents can be aspirated through the #2, white tube relieving gastric distention.
 9. If breath sounds are negative and epigastric sounds are positive, attempt ventilation through the shorter, #2 white tube and reassess for lung and epigastric sounds. If breath sounds are present and the chest rises, you have intubated the trachea and continue ventilation through the shorter tube.
 10. The device is secured by the large pharyngeal balloon. Secure the device.
 11. **Confirm tube placement using end-tidal CO₂ detector or esophageal bulb device.**
 12. **It is required that the airway be monitored continuously through Capnography or end tidal CO₂ and Pulse Oximetry.**
 13. **It is required that an Airway Evaluation Form be completed with any BIAD use.**
- **Endotracheal intubation with a Combitube in Place (Only if ventilation unsuccessful):**
 - A. The tube must be in the esophageal mode.
 - B. Prepare all equipment needed for endotracheal intubation.
 - C. Decompress the stomach by aspirating contents through the shorter, white tube.
 - D. Hyperventilate the patient.
 - E. Deflate the balloons on the Combitube and remove. Suction equipment must be ready.
 - F. Rapidly proceed with endotracheal intubation.

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle.

Procedure 2

2009

This procedure has been altered from the original 2009 NCEP Procedure by the local EMS Medical Director

Standards Procedure (Skill) Airway: BIAD King

Clinical Indications for Blind Insertion Airway Device (BIAD) Use:

- Inability to adequately ventilate a patient with a Bag Valve Mask or longer EMS transport distances require a more advanced airway.
- Appropriate intubation is impossible due to patient access or difficult airway anatomy.
- Inability to secure an endotracheal tube in a patient who does not have a gag reflex where at least one failed intubation attempt has occurred.
- Patient must be unconscious.

B	EMT	B
I	EMT-I	I
P	EMT-P	P

Procedure:

1. Preoxygenate and hyperventilate the patient.
2. Select the appropriate tube size for the patient.
3. Lubricate the tube.
4. Grasp the patient's tongue and jaw with your gloved hand and pull forward.
5. Gently insert the tube rotated laterally 45-90 degrees so that the blue orientation line is touching the corner of the mouth. Once the tip is at the base of the tongue, rotate the tube back to midline. Insert the airway until the base of the connector is in line with the teeth and gums.
6. Inflate the pilot balloon with 45-90 ml of air depending on the size of the device used.
7. Ventilate the patient while gently withdrawing the airway until the patient is easily ventilated.
8. Auscultate for breath sounds and sounds over the epigastrium and look for the chest to rise and fall.
9. The large pharyngeal balloon secures the device. Secure the device.
10. Confirm tube placement using end-tidal CO₂ detector.
11. It is required that the airway be monitored continuously through Capnography or end tidal CO₂ and Pulse Oximetry.
12. It is required that an Airway Evaluation Form be completed with any BIAD use.

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle.



Clinical Indications:

- The End-Tidal CO₂ detector shall be used with any Endotracheal Tube or Blind Insertion Airway Device use.

B	EMT	B
I	EMT- I	I
P	EMT- P	P

It is strongly recommended that continuous Capnography be used in place of or in addition to the use of an End-Tidal CO₂ detector.

Procedure:

1. Attach End-Tidal CO₂ detector to the Blind Insertion Airway Device or the Endotracheal Tube.
2. Note color change. A color change or CO₂ detection will be documented on each respiratory failure or cardiac arrest patient.
3. The CO₂ detector shall remain in place with the airway and monitored throughout the prehospital care and transport unless continuous Capnography is used. Any loss of CO₂ detection or color change is to be documented and monitored as procedures are done to verify or correct the airway problem.
4. Tube placement should be verified frequently and always with each patient move or loss of color change in the End-Tidal CO₂ detector.
5. Document the procedure and the results on/with the Patient Care Report (PCR) as well as on the Airway Evaluation Form.
6. Properly placed ETT will cause a color change to yellow (2.0-5.0). ETT placement in the esophagus will result in color change to purple (0.03-0.5). Yellow is good, purple is bad.

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

Standards Procedure (Skill) Airway – Nebulizer Inhalation Therapy

Clinical Indications:

- Patients experiencing bronchospasm.

B	EMT	B
I	EMT-I	I
P	EMT-P	P

Procedure:

- Gather the necessary equipment.
- Assemble the nebulizer kit.
- Instill the premixed drug (such as Albuterol or other approved drug) into the reservoir well of the nebulizer.
- Connect the nebulizer device to oxygen at 4 - 8 liters per minute or adequate flow to produce a steady, visible mist.
- Instruct the patient to inhale normally through the mouthpiece of the nebulizer. The patient needs to have a good lip seal around the mouthpiece.
- The treatment should last until the solution is depleted. Tapping the reservoir well near the end of the treatment will assist in utilizing all of the solution.
- Monitor the patient for medication effects. This should include the patient's assessment of his/her response to the treatment and reassessment of vital signs, ECG, and breath sounds.
- Assess and document peak flows before and after nebulizer treatments.
- Document the treatment, dose, and route on/with the patient care report (PCR).
- Metered dose inhalers may be administered in lieu of nebulizer

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

Standards Procedure (Skill)

Capnography

Clinical Indications:

- Capnography shall be used when available with the use of all invasive airway procedures including endotracheal, nasotracheal, cricothyrotomy, or Blind Insertion Airway Devices (BIAD).
- Capnography should also be used when possible with CPAP.

B	EMT	B
I	EMT-I	I
P	EMT-P	P

Procedure:

1. Attach capnography sensor to the BIAD, endotracheal tube, or oxygen delivery device.
2. Note CO₂ level and waveform changes.
3. The capnometer shall remain in place with the airway and be monitored throughout the prehospital care and transport. It should not be removed until transfer of care.
4. Any loss of CO₂ detection or waveform indicates an airway problem and should be documented.
5. The capnogram should be monitored as procedures are performed to verify or correct the airway problem.
6. Document the procedure and results on/with the Patient Care Report (PCR) and the Airway Evaluation Form.

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

Standards Procedure (Skill) Orthostatic Blood Pressure Measurement

	MR	
B	EMT	B
I	EMT - I	I
P	EMT - P	P

Clinical Indications:

- Patient situations with suspected blood, fluid loss, or dehydration with no indication for spinal immobilization.
- Patients \geq 8 years of age, or patients larger than the Broselow-Luten tape

Procedure:

1. Gather and prepare standard sphygmomanometer and stethoscope.
2. With the patient supine, obtain pulse and blood pressure.
3. Have the patient sit upright.
4. After 30 seconds, obtain blood pressure and pulse.
5. If the systolic blood pressure falls more than 30 mmHg or the pulse rises more than 20 bpm, the patient is considered to be orthostatic.
6. If a patient experiences dizziness upon sitting or is obviously dehydrated based on history or physical exam, formal orthostatic examination should be omitted and fluid resuscitation initiated.

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.



Temperature Measurement

	MR	
B	EMT	B
I	EMT-I	I
P	EMT-P	P

Clinical Indications:

- Monitoring body temperature in a patient with suspected infection, hypothermia, hyperthermia, or to assist in evaluating resuscitation efforts.

Procedure:

- If clinically appropriate, allow the patient to reach equilibrium with the surrounding environment.
- For adult patients that are conscious, cooperative, and in no respiratory distress, an oral temperature is preferred (steps 3 to 5 below). For infants or adults that do not meet the criteria above, a rectal temperature is preferred (steps 6 to 8 below).
- To obtain an oral temperature, ensure the patient has no significant oral trauma and place the thermometer under the patient's tongue with appropriate sterile covering.
- Have the patient seal their mouth closed around thermometer.
- If using an electric thermometer, leave the device in place until there is indication an accurate temperature has been recorded (per the "beep" or other indicator specific to the device). If using a traditional thermometer, leave it in place until there is no change in the reading for at least 30 seconds (usually 2 to 3 minutes). Proceed to step 9.
- Prior to obtaining a rectal temperature, assess whether the patient has suffered any rectal trauma by history and/or brief examination as appropriate for patient's complaint.
- To obtain a rectal temperature, cover the thermometer with an appropriate sterile cover, apply lubricant, and insert into rectum no more than 1 to 2 cm beyond the external anal sphincter.
- Follow guidelines in step 5 above to obtain temperature.
- Record time, temperature, method (oral, rectal), and scale (C° or F°) in Patient Care Report (PCR).

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

Wound Care-Hemostatic Agent

Clinical Indications:

- Serious hemorrhage that can not be controlled by other means.

Contraindications:

- Wounds involving open thoracic or abdominal cavities.

Procedure:

1. Apply approved non-heat-generating hemostatic agent per manufacturer's instructions.
2. Supplement with direct pressure and standard hemorrhage control techniques.
3. Apply dressing.

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

	MR	
B	EMT	B
I	EMT- I	I
P	EMT- P	P

Preferred local hemostatic dressing: Stasilon



Wound Care-Tourniquet

Clinical Indications:

- Life threatening extremity hemorrhage that can not be controlled by other means.
- Serious or life threatening extremity hemorrhage and tactical considerations prevent the use of standard hemorrhage control techniques.

Contraindications:

- Non-extremity hemorrhage
- Proximal extremity location where tourniquet application is not practical

	MR	
B	EMT	B
I	EMT-I	I
P	EMT-P	P

Procedure:

1. Place tourniquet proximal to wound
2. Tighten per manufacturer instructions until hemorrhage stops and/or distal pulses in affected extremity disappear.
3. Secure tourniquet per manufacturer instructions
4. Note time of tourniquet application and communicate this to receiving care providers
5. Dress wounds per standard wound care protocol
6. If delayed or prolonged transport and tourniquet application time > 45 minutes: consider reattempting standard hemorrhage control techniques and removing tourniquet

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System.

Airway, Oxygen Administration

MR

Clinical Indications:

- Patient experiencing hypoxia or respiratory compromise
- Presence of respiratory distress or conditions requiring oxygen

Procedure:

1. Identify patient respiratory status: Severe vs. moderate vs. mild
2. Severe: Pulse oximetry < 90%, signs of increased effort, hypoxia
High flow oxygen via non-rebreather mask
Consider advanced airway management
Correct cause of hypoxia
3. Moderate: Pulse oximetry between 90-96%, increased effort, hypoxia
Oxygen as necessary to achieve SP02 >96%
Correct cause of hypoxia
4. Mild: Pulse oximetry >96% with increased effort
Oxygen 2-4 LPM via cannula
Correct cause of hypoxia

Use caution with COPD patients.

The following patients should receive high flow oxygen:

- Respiratory burns
- Shock patients
- Chemical inhalations
- Carbon monoxide exposure
- Intubated patients

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle., or other mechanisms as deemed appropriate by the local EMS System.

Clinical Indications:

- Need for medication administration
- Confirm right indication, drug, dose, route, time, patient, documentation

Procedure IV bolus:

1. Determine need
2. Prepare medication
3. Administer medication (swallow or sublingual)
5. Monitor effect

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle, or other mechanisms as deemed appropriate by the local EMS System.

B	EMT	B
I	EMT-I	I
P	EMT-P	P

Medication Administration, auto injector

Clinical Indications:

- Need for medication administration
- Confirm right indication, drug, dose, route, time, patient, documentation

Procedure IV bolus:

1. Determine need
2. Check injection site (thigh) for buttons or items that may interfere with injection
3. Grasp the injector with thumb and first two fingers
5. Pull the injector from clip/holder with smooth motion and remove safety cap.
6. Locate injection site lateral mid thigh.
7. Position auto injector against thigh.
8. Apply firm, even pressure to the injector until it pushes the needle into thigh
9. Hold the injector in place for 10 seconds post injection.
10. Dispose of sharps
11. Monitor patient

Certification Requirements:

- Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle, or other mechanisms as deemed appropriate by the local EMS System.

B	EMT	B
I	EMT-I	I
P	EMT-P	P

Protocol Set

- Each provider in the system is required to review and maintain familiarity with system protocol and applicable scope of practice.
- http://www.cabarruscounty.us/ems/docs/ems_protocols.pdf

Logistics

- Medications and supplies normally stocked by EMS will be exchanged with first responder agencies upon scene use (expendable items only).
- Departments are responsible for initial purchase/acquisition of items.

Cost Estimate

- Tourniquet \$29.00 each (recommended)
- Stasilon \$9 each (recommended)
- Ibuprofen \$2.00 bottle (optional)
- Aspirin \$1.50 bottle (required)
- NTG \$7.00 bottle (optional)
- Pep-Tum \$2.00 pack (optional)
- Acetaminophen \$2.00 bottle (optional)
- Pulse Oximeter \$60.00 each (mandatory if doing BIAD)
- BIAD \$50.00 each (recommended)
- ETCO2 Color \$9.00 each (mandatory if doing BIAD)
- Albuteral \$2.00 each (optional)
- Diphenhydramine \$3.00 box (optional)
- Narcan \$19.00 each (optional)
- Nasal atomizer \$3.00 each (provided by EMS)
- Otrivin \$2.50 each (optional)
- Nebulizer \$3.00 each (provided by EMS)

Purchasing

- Departments may purchase from their established vendors
- Bulk pricing discounts may be available through Cabarrus EMS vendors
- A prescription authorization form will be necessary for ordering supplies (signed by system Medical Director)

Questions?

- Questions regarding protocols, implementation, and logistics should be forwarded to:

EMS Assistant Director Alan Thompson

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704/920-2606

References / Resources

- www.ncems.org
- www.nccep.org
- www.cabarruscounty.us/ems